



Tecumseh

Pursuit of the Low GWP World

Tecumseh Global Refrigerant Vision

Founded in 1934, Tecumseh Products Company has consistently been a global leader of commercial refrigeration technology. Tecumseh offers hermetic reciprocating, rotary and scroll compressors, ranging in capacity from 1/15th to 30 horsepower, as well as a complete line of condensing units and systems for use in residential and commercial refrigeration and air conditioning applications. Tecumseh products are manufactured on four continents. Our employees located globally design and manufacture innovative refrigeration and air-conditioning products for the people around the world.

As a global citizen, environmental sustainability is not an option to Tecumseh. It is engraved in our culture to continuously introduce high performance refrigeration solutions, preserving the environment for the next generation. Tecumseh is fully committed to reduce carbon dioxide emissions and to utilize low GWP refrigerants by pursuing innovative solutions through its Research & Development efforts. Tecumseh has dedicated considerable resources in evaluating low GWP refrigerants and, through those efforts, provides the following updates on today's refrigerant landscape.

Current State of Transition

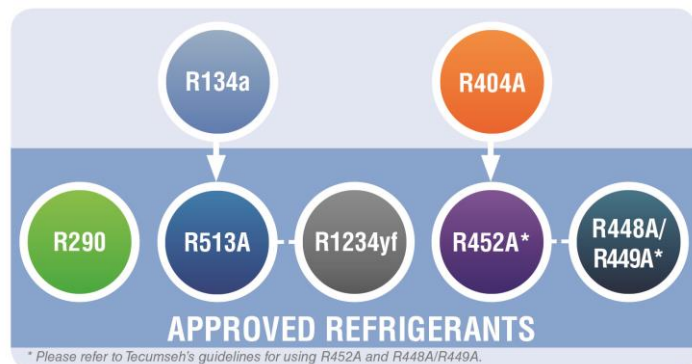
When considering new installations, Tecumseh recommends the natural refrigerant R-290, when system size and location allow.

For new installations where R-290 cannot be applied, or for conversion or maintenance of R-404A installations, Tecumseh recommends the refrigerant **R-452A**. R-452A is a refrigerant approved and used in many applications such as transport, remote condensing units for both chilling and freezing temperatures, and various commercial refrigeration applications.

The use of the **R-448A** and **R-449A** is also allowed with some limitations. Tecumseh offers Guidelines for the application of these refrigerants at:

<http://www.tecumseh.com/en/United-States/Library/Guidelines-and-Recommendations>

In many existing high temperature applications, R-134a is a solution of choice, with a GWP 60% lower than the one from the R-404A. Tecumseh supports the transition of R-134a to R-513A, with a GWP of 631, and approves R-513A for use in its R-134a product range.



Tecumseh's Choice of Low-GWP Refrigerants to Support Today's HFC Phase Down



Tecumseh

Vision Toward a Low GWP World

Fluorinated gas substances are harmful to the environment, and in the coming years they will be limited on all applications globally. Although the timeline to adopt certain refrigerants may vary by region or country due to their individual regulatory requirements, Tecumseh has a global vision of refrigerant transition to pursue increasingly less GWP.

In a short-to-medium term view, local regulations will significantly reduce or ban the usage of HFC refrigerants with high GWP on refrigeration applications. In the long term, the refrigerant choice for commercial refrigeration will be natural refrigerants, with extremely low GWP, or low-GWP synthetic refrigerants. To ensure it supports customers and their dynamic needs throughout the transitions, Tecumseh will guide customers with promising choices of refrigerants and will work closely with them to successfully develop efficient and environmentally conscious long term solutions.

“Tecumseh, a leader of hermetic piston technology, certifies itself as a key actor in the transition to a sustainable future”

About Tecumseh Products Company LLC

Founded in 1934, Tecumseh Products Company LLC is a leading global manufacturer of hermetic reciprocating, rotary and scroll compressors ranging in capacity from 1/15th to 30 horsepower, as well as offering a complete line of condensing units and systems for use in residential and commercial refrigeration and air conditioning applications. Tecumseh products are manufactured on four continents and sold globally through a network of sales professionals, authorized wholesalers and licensed distributors offering brand names that include: AE®, AE²®, AW®, Celseon®, L'Unite Hermetique®, Masterflux®, Silensys®, and Wintsys®. Tecumseh Products Company LLC is headquartered in Ann Arbor, Michigan.

For more information on Tecumseh visit www.tecumseh.com.